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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/064,204	06/21/2002	Richard Lee-Chee Kuo	ASTP0025USA	2822
27765	7590	09/28/2006	EXAMINER	
NORTH AMERICA INTELLECTUAL PROPERTY CORPORATION			MERED, HABTE	
P.O. BOX 506			ART UNIT	
MERRIFIELD, VA 22116			PAPER NUMBER	
			2616	

DATE MAILED: 09/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/064,204

Applicant(s)

KUO, RICHARD LEE-CHEE

Examiner

Habte Mered

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 June 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-6 are pending.

Specification

2. The disclosure is objected to because of the following informalities: On page 13 of the Specification, in lines 6-8, a label 126 is used to refer to a Radio Bearer Setup Message and a label 126a is used to refer to an Information Element but these labels are supposed to be found in the figures but do not exist in any of the figures submitted by the Applicant.

Appropriate correction is required.

Claim Objections

3. **Claim 1** is objected to because of the following informalities: In claim 1, in line 19, the variable "START_VALUE_TO_TRANSMIT" has to be replaced by "START_VALUE_TO_TRANSMIT". Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. **Claims 1-6** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. In independent **claim 1**, the limitation in lines 9-11 that recites "...in response to the Radio Bearer Setup message, the UE assigning a first START value to a START_VALUE_TO_TRANSMIT variable according to the HFN of all established RBs

in the first domain..." implies that the START_VALUE_TO_TRANSMIT variable contains HFN values for established RBs and contradicts the specification and the Standards the disclosure in the specification relies heavily on. As the specification indicates in Paragraph 14 and the 3GPP TS 25.331 V3.10.0 indicates START_VALUE_TO_TRANSMIT contains the value for only new radio bearer(s) to be transmitted in a response message (i.e. Bearer Setup Complete).

Consequently, dependent claims 2-4 are covered under the same 112 2nd paragraph rejection.

5. In independent **claim 5**, the limitation in lines 9-11 that recites "...in response to the Radio Bearer Setup message, the UE assigning a first START value to a START_VALUE_TO_TRANSMIT variable according to the HFN of all established RBs in the first domain..." implies that the START_VALUE_TO_TRANSMIT variable contains HFN values for established RBs and contradicts the specification and the Standards the disclosure in the specification relies heavily on. As the specification indicates in Paragraph 14 and the 3GPP TS 25.331 V3.10.0 indicates START_VALUE_TO_TRANSMIT contains the value for only new radio bearer(s) to be transmitted in a response message (i.e. Bearer Setup Complete).

Consequently, dependent claim 6 is covered under the same 112 2nd paragraph rejection.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. **Claims 1-6** are rejected under 35 U.S.C. 102(e) as being anticipated by 3GPP

TS 25.331 (3rd Generation Partnership Project; Technical Specification Group Radio

Access Network; Radio Resource Control (RRC); Protocol Specification (Release 1999),

V3.10.0, 03/2002), hereinafter referred to as 3GPP/331.

3GPP/331 specifies the Radio Resource Control protocol for the UE-UTRAN radio interfaces. In particular, the document specifies the protocol for a specific scenario the Applicant's invention relies on which is namely establishment of a new radio bearer channel done in conjunction with an SRNC relocation procedure.

7. Regarding **claim 1**, as best understood in view of the 112 2nd paragraph rejection above, 3GPP/331 discloses a method for synchronizing a hyperframe number (HFN) between peer radio bearers (RBs) respectively supported by a user equipment (UE) and a Universal Terrestrial Radio Access Network (UTRAN), the peer RBs created by a Radio Bearer Setup procedure performed in conjunction with a Serving Radio Network Subsystem (SRNS) relocation procedure (**Page 107, Section 8.2.2.2, Lines 21-25**), the method comprising:

sending a Radio Bearer Setup message from the UTRAN to the UE (**See Figure 8.2.2-1, page 104**), the Radio Bearer Setup message indicating that SRNS relocation is to be

performed and that a new RB is to be established in a first domain (**Page 110, Lines 35-37**);

in response to the Radio Bearer Setup message, the UE assigning a first START value to a START_VALUE_TO_TRANSMIT variable according to the HFNs of all established RBs in the first domain (**Page 110, Line 38**);

the UE utilizing the START_VALUE_TO_TRANSMIT variable to set an HFN of the new RB; (**Page 229, Lines 1-5**)

in response to the Radio Bearer Setup message, the UE generating a START list containing a plurality of entries corresponding to a plurality of domains, the plurality of domains including the first domain (**Page 111, Lines 2-4 and Section 8.5.9 on Page 205**);

the UE filling the entries with corresponding START values, wherein the UE synchronizes the entry corresponding to the first domain (**Page 111, Line 3**) to hold a value that is identical to the value of the START_VALUE_TO_TRANSMIT variable;

in response to the Radio Bearer Setup message, the UE composing a reply message (**i.e. it sends a Radio Bearer Setup Complete Message**), the reply message including the START list; and the UE sending the reply message to the UTRAN (**See Figure 8.2.2-1 and Section 8.2.2.4, Page 113, Lines 1-5 and see Section 10.2.34 describing the Information Elements of the Radio Bearer Setup Complete Message**)

(Note that the disclosure in this Application provides a method when the UTRAN sends a Radio Bearer Setup message to the UE requesting the establishment of

new radio bearers in conjunction with an SRNS relocation procedure indicated by including an optional IE in the Radio Bearer Setup Message (Page 107, Section 8.2.2.2, Lines 21-25), then the UE will calculate the HFN value for the new RB based on the HFNs of the established RBs and put it as a Start value for the new RB in the START_VALUE_TO_TRANSMIT variable. Then the UE recalculates a second Start value for the established RBs and places it in the Start list IE of the Bearer Setup Complete message. The Applicant assumes the second Start value calculation will involve calculating a second HFN value for the new RB and consequently the first HFN value calculated as a start value for the new RB stored in the START_VALUE_TO_TRANSMIT variable will be different from the second HFN value calculated as a start value for the new RB stored in the Start list IE of the Bearer Setup Complete message requiring synchronization of these values at the UTRAN. However, a careful review shows that the 3GPP/331 clearly states that the HFN value is calculated once for the new RB and the second Start calculation does not involve the new RB and therefore the UTRAN will only look for the HFN value of the new RB in the START_VALUE_TO_TRANSMIT variable. The 3GPP/331 illustrates these facts in Section 8.5.9 on page 205 and Section 8.6.4.2 on page 229)

8. Regarding claim 2, 3GPP/331 discloses a method where the UE assigns the first START value to the entry corresponding to the first domain in the START list. (Page 111, Lines 1-3)

9. Regarding **claim 3**, 3GPP/331 discloses a method where the UE assigns the START value of the entry in the START list corresponding to the first domain to the START_VALUE_TO_TRANSMIT variable. **(Page 110, Line 38)**

10. Regarding **claim 4**, 3GPP/331 discloses a wireless device comprising a central processing unit (CPU) in electrical communications with a memory, the memory comprising program code for implementing the method of claim 1. **(This is inherent to any mobile User Equipment compliant with the 3Gpp/331 specifications)**

11. Regarding **claim 5**, 3GPP/331 discloses a method for synchronizing a hyperframe number (HFN) between peer radio bearers (RBs) respectively supported by a user equipment (UE) and a Universal Terrestrial Radio Access Network (UTRAN), the peer RBs created by a Radio Bearer Setup procedure performed in conjunction with a Serving Radio Network Subsystem (SRNS) relocation procedure **(Page 107, Section 8.2.2.2, Lines 21-25)**, the method comprising:

sending a Radio Bearer Setup message from the UTRAN to the UE **(See Figure 8.2.2-1, page 104)**, the Radio Bearer Setup message indicating that SRNS relocation is to be performed and that a new RB is to be established in a first domain **(Page 110, Lines 35-37)**; in response to the Radio Bearer Setup message, the UE assigning a first START value to a START_VALUE_TO_TRANSMIT variable according to the HFNs of all established RBs in the first domain **(Page 110, Line 38)**;

the UE utilizing the START_VALUE_TO_TRANSMIT variable to set an HFN of the new RB **(Page 229, Lines 1-5)**; in response to the Radio Bearer Setup message, the UE generating a START list containing a plurality of START values corresponding to a

plurality of domains, the plurality of domains including the first domain(**Page 111, Lines 2-4 and Section 8.5.9 on Page 205**); in response to the Radio Bearer Setup message (i.e. it sends a **Radio Bearer Setup Complete Message**), the UE composing a reply message, the reply message including the START list as a first information element (IE) and including the first START value of the START_VALUE_TO_TRANSMIT variable as a second IE; the UE sending the reply message to the UTRAN(**See Figure 8.2.2-1 and Section 8.2.2.4, Page 113, Lines 1-5 and see Section 10.2.34 describing the Information Elements of the Radio Bearer Setup Complete Message**); and the UTRAN utilizing the second IE to set a corresponding HFN for the new RB. (It is the position of the Examiner in view of the detailed rejection provided that the Applicant is simply copying the value of the START_VALUE_TO_TRANSMIT variable into a new information element. The 3GPP/331 in section 10.1.1 facilitates adding new information elements as protocol extensions. However, the 3GPP/331 spec provides a means for the UTRAN to look for HFN values for the new RBs in only the START_VALUE_TO_TRANSMIT variable and there is no need at all for adding information elements for the purpose of synchronization.)

12. Regarding **claim 5**, 3GPP/331 discloses a wireless device comprising a central processing unit (CPU) in electrical communications with a memory, the memory comprising program code for implementing the method of claim 5. (This is inherent to any mobile User Equipment compliant with the 3Gpp/331 specifications)

Conclusion


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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Habte Mered whose telephone number is 571 272 6046. The examiner can normally be reached on Monday to Friday 9:30AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on 571 272 3088. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

09-23-2006
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